Name of work: Improvements to Roads and Drains in Thindlu colony, Narasimpura layout, Kuvempu Nagara and surrounding area in ward No. 09

		Estimate Cost Rs.							6500000.00
Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Removing and resetting footpath slab (P.no.256,I no.37.56 of pw, P&IWTDd SR 2018/19)	Sqm							
	Desilting of Drains								
	Narasimpura 1st Stage main Road		2	90.00		0.30	54.00		
	Narasimpura 2nd Stage main Road		2	120.00		0.35	84.00		
	Narasimpura 4th main Road 1st Stage RHS		2	120.00		0.30	72.00		
	Narasimpura 5th main Road 1st Stage RHS		2	110.00		0.35	77.00		
	Narasimpura 5th main Road 1st Stage LHS		2	40.00		0.25	20.00		
	Narasimpura 6th main Road 1st Stage RHS		2	70.00		0.30	42.00		
	Narasimpura 6th main Road 1st Stage LHS		2	90.00		0.35	63.00		
	Narasimpura 10th Main Road 2nd Stage		2	120.00		0.35	84.00		
	Narasimpura 11th Main Road 2nd Stage		2	130.00		0.30	78.00		
	Narasimpura 9th Main Road 2nd Stage RHS		2	50.00		0.25	25.00		
	Narasimpura 9th Main Road 2nd Stage LHS		2	120.00		0.30	72.00		
	Narasimpura 8th main Road 2nd stage RHS		2	90.00		0.35	63.00		
	Narasimpura 8th main Road 2nd stage LHS		2	120.00		0.30	72.00		
	HMT layout 6th block 1st main (Durgaparmeshwari Road)		2	230.00		0.30	138.00		
	HMT layout 6th block 3rd main road		2	200.00		0.30	120.00		
	HMT layout 6th block 6th main road		2	80.00		0.35	56.00		
							1120.00	**208.82**	**233878.00**
	Basic Rate	197.00							
	Area Weightage @ 6%	11.82							
	Total	**208.82**							
2	KSRRB M500-10. Tack Coat:- Providing and applying **tack coat** using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechancial broom. complete as per specifications. MORTH Specification No. 503 (P-159, Item.no 21.10).	**Sqm**							
	Narasimpura 1st Stage main Road		1	90.00	9.00		810.00		
	Narasimpura 2nd Stage main Road		1	120.00	9.00		1080.00		
	Narasimpura 4th main Road 1st Stage RHS		1	120.00	7.00		840.00		
	Narasimpura 5th main Road 1st Stage RHS		1	110.00	7.00		770.00		
	Narasimpura 5th main Road 1st Stage LHS		1	40.00	7.00		280.00		
	Narasimpura 6th main Road 1st Stage RHS		1	70.00	7.00		490.00		
	Narasimpura 6th main Road 1st Stage LHS		1	90.00	7.00		630.00		
	Narasimpura 10th Main Road 2nd Stage		1	120.00	7.00		840.00		
	Narasimpura 11th Main Road 2nd Stage		1	130.00	7.00		910.00		
	Narasimpura 9th Main Road 2nd Stage RHS		1	50.00	7.00		350.00		
	Narasimpura 9th Main Road 2nd Stage LHS		1	120.00	7.00		840.00		
	Narasimpura 8th main Road 2nd stage RHS		1	90.00	7.00		630.00		

	Narasimpura 8th main Road 2nd stage LHS		1	120.00	7.00		840.00		
	HMT layout 6th block 1st main (Durgaparmeshwari Road)		1	230.00	6.00		1380.00		
	HMT layout 6th block 3rd main road		1	200.00	5.00		1000.00		
	HMT layout 6th block 6th main road		1	80.00	5.00		400.00		
							12090.00	**12.72**	**153785.00**
	Basic Rate	12.00							
	Area Weightage @ 6%	0.72							
	Total	**12.72**							
3	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19	**Cum**							
	Narasimpura 1st Stage main Road		1	90.00	9.00	0.04	32.40		
	Narasimpura 2nd Stage main Road		1	120.00	9.00	0.04	43.20		
	Narasimpura 4th main Road 1st Stage RHS		1	120.00	7.00	0.04	33.60		
	Narasimpura 5th main Road 1st Stage RHS		1	110.00	7.00	0.04	30.80		
	Narasimpura 5th main Road 1st Stage LHS		1	40.00	7.00	0.04	11.20		
	Narasimpura 6th main Road 1st Stage RHS		1	70.00	7.00	0.04	19.60		
	Narasimpura 6th main Road 1st Stage LHS		1	90.00	7.00	0.04	25.20		
	Narasimpura 10th Main Road 2nd Stage		1	120.00	7.00	0.04	33.60		
	Narasimpura 11th Main Road 2nd Stage		1	130.00	7.00	0.04	36.40		
	Narasimpura 9th Main Road 2nd Stage RHS		1	50.00	7.00	0.04	14.00		
	Narasimpura 9th Main Road 2nd Stage LHS		1	120.00	7.00	0.04	33.60		
	Narasimpura 8th main Road 2nd stage RHS		1	90.00	7.00	0.04	25.20		
	Narasimpura 8th main Road 2nd stage LHS		1	120.00	7.00	0.04	33.60		
	HMT layout 6th block 1st main (Durgaparmeshwari Road)		1	230.00	5.00	0.04	46.00		
	HMT layout 6th block 3rd main road		1	200.00	5.00	0.04	40.00		
	HMT layout 6th block 6th main road		1	80.00	5.00	0.04	16.00		
							474.40		
	For profile correction (8% of total quantity)						**37.95**		
							512.35	**8869.02**	**4544060.00**
	Basic Rate	8367.00							
	Area Weightage @ 6%	502.02							
	Total	**8869.02**							

4	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2015-16).	Sqm							
	Narasimpura 1st Stage main Road		2.5	90.00		0.10	22.50		
	Narasimpura 2nd Stage main Road		2.5	120.00		0.10	30.00		
	Narasimpura 4th main Road 1st Stage RHS		2.5	120.00		0.10	30.00		
	Narasimpura 5th main Road 1st Stage RHS		2.5	110.00		0.10	27.50		
	Narasimpura 5th main Road 1st Stage LHS		2.5	40.00		0.10	10.00		
	Narasimpura 6th main Road 1st Stage RHS		2.5	70.00		0.10	17.50		
	Narasimpura 6th main Road 1st Stage LHS		2.5	90.00		0.10	22.50		
	Narasimpura 10th Main Road 2nd Stage		2.5	120.00		0.10	30.00		
	Narasimpura 11th Main Road 2nd Stage		2.5	130.00		0.10	32.50		
	Narasimpura 9th Main Road 2nd Stage RHS		2.5	50.00		0.10	12.50		
	Narasimpura 9th Main Road 2nd Stage LHS		2.5	120.00		0.10	30.00		
	Narasimpura 8th main Road 2nd stage RHS		2.5	90.00		0.10	22.50		
	Narasimpura 8th main Road 2nd stage LHS		2.5	120.00		0.10	30.00		
	HMT layout 6th block 1st main (Durgaparmeshwari Road)		2.5	230.00		0.10	57.50		
	HMT layout 6th block 3rd main road		2.5	200.00		0.10	50.00		
	HMT layout 6th block 6th main road		2.5	80.00		0.10	20.00		
							445.00	**454.74**	**202359.00**
	Basic Rate	429.00							
	Area Weightage @ 6%	25.74							
	Total	**454.74**							
5	KSRB 15-17.6: Providing and applying painting two coats (excluding priming coat) on new wood surface and / or wood based surface with **enamel paint** to give an even shade, cleaning the surface of all dirt, dust and foreign matter, sand papering including cost of materials, labour, complete as per specifications.Page No. 121/ Item No. 15.60.1 / PWD SR 2018-19	**Sqm**							
	Narasimpura 1st Stage main Road		2	90.00		0.30	54.00		
	Narasimpura 2nd Stage main Road		2	120.00		0.30	72.00		
	Narasimpura 4th main Road 1st Stage RHS		2	120.00		0.30	72.00		
	Narasimpura 5th main Road 1st Stage RHS		2	110.00		0.30	66.00		
	Narasimpura 5th main Road 1st Stage LHS		2	40.00		0.30	24.00		
	Narasimpura 6th main Road 1st Stage RHS		2	70.00		0.30	42.00		
	Narasimpura 6th main Road 1st Stage LHS		2	90.00		0.30	54.00		
	Narasimpura 10th Main Road 2nd Stage		2	120.00		0.30	72.00		
	Narasimpura 11th Main Road 2nd Stage		2	130.00		0.30	78.00		
	Narasimpura 9th Main Road 2nd Stage RHS		2	50.00		0.30	30.00		
	Narasimpura 9th Main Road 2nd Stage LHS		2	120.00		0.30	72.00		
	Narasimpura 8th main Road 2nd stage RHS		2	90.00		0.30	54.00		
	Narasimpura 8th main Road 2nd stage LHS		2	120.00		0.30	72.00		
							762.00	**65.72**	**50079.00**

	Basic Rate	62.00							
	Area Weightage @ 6%	3.72							
	Total	**65.72**							
6	Dismantling cement concrete flooring or plain cement concrete work including removing and conveying the debris to distance upto 200 m (within average thickness of 15 cms), No. 270 Item No. 37.51 PWD SR 2018-19	Sqm							
	Narasimpura layout 3rd Cross		1	47.00	7.00		329.00		
							329.00	**91.16**	**29992.00**
	Basic Rate	86.00							
	Area Weightage @ 6%	5.16							
	Total	**91.16**							
7	KSRRB M300-59.2: loosening, leveling and compacting original ground supporting embankment to facilitate placement of first layer of embankment, scarified to a depth of 150mm, mixed with water at OMC and then compacted by rolling so as to achieve minimum dry density as given in table 300-2 for embankment construction, complete as per specifications, case-II: compacting original ground supporting embankment, (which includes watering charges & compaction by vibratory roller) MORTH specification No. 3.5.3.4 Page No. 146. Item No. 19.66/ PWD SR 2018-19	**Sqm**							
	Narasimpura layout 3rd Cross		1	47.00	7.00		329.00		
							329.00	**24.38**	**8021.00**
	Basic Rate	23.00							
	Area Weightage @ 6%	1.38							
	Total	**24.38**							
8	KSRB-4-1.3 : Providing and laying in position plain cement concrete of mix M 1:4:8 withOPC cement at 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2, No. 13/ Item No. 4.3/ PWD SR 2018-19	**Cum**							
	Narasimpura layout 3rd Cross		1	47.00	7.00	0.15	49.35		
							49.35	**5408.12**	**266891.00**
	Basic Rate	5102.00							
	Area Weightage @ 6%	306.12							
	Total	**5408.12**							

9	Constructing un-reienforced palne cemetn conctere for pavements using rate concrete M30 Over a prepared base with OPC course aggregate at 0.69cum fine aggregates at 0.64cum course anf fine aggregate confirming to IS:383:2016 with super plasticizers at 3mte of its confirming IS:9103-2008. Item no22.6 page no-175	Cum							
	Narasimpura layout 3rd Cross		1	47.00	7.00	0.10	32.90		
							32.90	**5210.96**	**171441.00**
	Basic Rate	4916.00							
	Area Weightage @ 6%	294.96							
	Total	**5210.96**							
10	KSRRB M2600-3: (ii) Providing & fixing 20 mm thick compressible fibre board in expansion joint complete as per drawing & technical specification complete as per specifications, MORTH specification No. 2605, No. 233/ Item No. 31.3 PWD SR 2015-16	M							
	Narasimpura layout 3rd Cross		6	7.00			42.00		
							42.00	**135.68**	**5699.00**
	Basic Rate	128.00							
	Area Weightage @ 6%	7.68							
	Total	**135.68**							
11	Vaccum De- writing with vaccum pump and suction mat and compaction with skin flater clubbed with floatiog disc including cost of generator, HOM of machinery Sereed Vibratory Power Floaterblade and diisc etc. with all lead and lift No. 171/ Item No. 22.7/ PWD SR 2018-19	Sqm							
	Narasimpura layout 3rd Cross		1	47.00	7.00		329.00		
							329.00	**72.08**	**23714.00**
	Basic Rate	68.00							
	Area Weightage @ 6%	4.08							
	Total	**72.08**							
							Grand Total		**5689919.00**
12	For 12% Applicable GST								**682790.00**
13	For 2% PMC Charges								**113798.00**
14	Miscesallaneous Charges	L/S							**13493.00**
									6500000.00

Technical Sanction
Accorded For RS.6.5 :cofaechenly
Head of A/C P3409
CER NO : 313 **Dt:** 07.03.2019

TA CE (YNK)

Name of work: Improvements to Roads and Drains in Muthuraya Swamy layout, Doddabomasandra, Nanjappa layout, Chamundeshwari Layout in ward No. 10,

		Estimate Cost Rs							5500000.00
Sl No	**Description of item**	**Unit**	**No**	**L**	**B**	**D**	**Qty**	**Rate**	**Amount**
1	**Removing and resetting footpath slab** (P.no.256,I no.37.56 of pw, P&IWTDd SR 2018/19)	Sqm							
	Nanjappa Layout 4th Cross		2	340.00		0.30	204.00		
	1st A main road Nanjappa layout (Ballappa Road)		2	160.00		0.30	96.00		
	Nanjappa layout 7th A Cross		2	27.00		0.25	13.50		
	C-ramayya Layout								
	10th Cross Road (RHS)		2	75.00		0.30	45.00		
	9th Cross Road (RHS)		2	75.00		0.25	37.50		
	8th Cross Road (RHS)		2	75.00		0.30	45.00		
	8th C Cross Road (LHS)		2	75.00		0.30	45.00		
	7th Cross Road(RHS)		2	75.00		0.30	45.00		
	10th Cross Road (LHS)		2	25.00		0.25	12.50		
	9th Cross Road (LHS)		2	25.00		0.30	15.00		
	7th Cross Road(LHS)		2	75.00		0.30	45.00		
	6th Cross Road (RHS)		2	75.00		0.25	37.50		
	Chamundeshwari layout 2nd main 4th Cross		2	90.00		0.30	54.00		
	Chamundeshwari layout 2nd main 5th Cross		2	30.00		0.25	15.00		
	1st A main road (Ganesh Gowda House Road)		2	136.00		0.30	81.60		
	Chamundeshwari Layout 5th Main		2	320.00		0.30	192.00		
	1st A main road (Ganesh Gowda House Road)		2	120.00		0.25	60.00		
	1st Main road (Ganesh Temple road) Chamundeshwari nagar		2	100.00		0.30	60.00		
	Approch Roads		2	100.00		0.25	50.00		
							1153.60	**208.82**	**240895.00**
	Basic Rate	197.00							
	Area Weightage @ 6%	11.82							
	Total	**208.82**							
2	KSRRB 300-1. **Earth work excavation** by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	Road Cutting Portion								
	Chamundeshwari Layout 5th Main		1	320.00	0.45	0.30	43.20		

	Nanjappa layout 4th Cross		1	340.00	0.50	0.30	51.00		
							94.20	**137.80**	**12981.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
3	KSRRB 300-51: making 50mm x 50mm furrows at 450 to the centre line of the road and at one meters interval in the existing thin bituminous wearing course including sweeping, taking out old materials, stacking the debris within a lead of 100 meters cost of all labour charges complete as per specifications. MORTH chapter 3, No. 146/ Item No. 19.57/ PWD SR 2018-19	Sqm							
	Cleaning of Existing Road Surface								
	Nanjappa Layout 4th Cross		1	340.00	5.00		1700.00		
	1st A main road Nanjappa layout (Ballappa Road)		1	160.00	5.00		800.00		
	Nanjappa layout 7th A Cross		1	27.00	5.00		135.00		
	C-ramayya Layout								
	10th Cross Road (RHS)		1	75.00	5.00		375.00		
	9th Cross Road (RHS)		1	75.00	5.00		375.00		
	8th Cross Road (RHS)		1	75.00	5.00		375.00		
	8th C Cross Road (LHS)		1	75.00	5.00		375.00		
	7th Cross Road(RHS)		1	75.00	5.00		375.00		
	10th Cross Road (LHS)		1	25.00	5.00		125.00		
	9th Cross Road (LHS)		1	25.00	5.00		125.00		
	7th Cross Road(LHS)		1	75.00	5.00		375.00		
	6th Cross Road (RHS)		1	75.00	5.00		375.00		
	Chamundeshwari layout 2nd main 4th Cross		1	90.00	5.00		450.00		
	Chamundeshwari layout 2nd main 5th Cross		1	30.00	5.00		150.00		
	1st A main road (Ganesh Gowda House Road)		1	136.00	5.00		680.00		
	Chamundeshwari Layout 5th Main		1	320.00	5.00		1600.00		
	1st A main road (Ganesh Gowda House Road)		1	120.00	5.00		600.00		
	1st Main road (Ganesh Temple road) Chamundeshwari nagar		1	100.00	5.00		500.00		
	Approch Roads		1	100.00	5.00		500.00		
							9990.00	**5.30**	**52947.00**
	Basic Rate	5.00							
	Area Weightage @ 6%	0.30							
	Total	**5.30**							
4	KSRRB M400-17: Providing, laying spreading and compacting graded stones aggregate to **wet mix macadam** specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying, in uniform layers with paver in sub base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH	Cum							

	specification NO. 406,P No. 155/ Item No. 20.18/ PWD SR 2018-19								
	Chamundeshwari Layout 5th Main		1	320.00	0.45	0.23	33.12		
	Nanjappa layout 4th Cross		1	340.00	0.50	0.23	39.10		
							72.22	**2001.28**	**144532.00**
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	**2001.28**							
5	KSRRB 500-4: providing and applying **primer coat** from 7.5 to 9.8 kg and 9.8 to 12.2kg per 10 sqm for surfaces of low and medium porosity respectively over prepared surface of granular base with cut bank M.C-70 or any other bitumen mixed with diesel at 10 kg per 10 sqm heated in bitumen boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specificationsDo- Medium Porosity MORTH chapter 5, No. 158/ Item No. 21.6/ PWD SR 2018-19	Sqm							
	Chamundeshwari Layout 5th Main		1	320.00	0.45		144.00		
	Nanjappa layout 4th Cross		1	340.00	0.50		170.00		
							314.00	**36.04**	**11317.00**
	Basic Rate	34.00							
	Area Weightage @ 6%	2.04							
	Total	**36.04**							
	KSRRB 500-11. Providing and laying **bituminous macadam** on Prepared Surface with crushed Coarse aggregates as per Design mix formulae for base/binding course including loading of aggregates with F.E loader,Hot mixing of Stone aggregates and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve desired density, but excluding cost of primer/Tack coat including lead, lift and cost of all materials, labour HOM of machinaries complete as per Specifications. MORTH Ch 5. using 40/60 TPH capacity HMP with Mechanical paver Gr-II (50mm - 75mm) with 3.4% VG-30 bitumen. Item no:21.11.6								
	Chamundeshwari Layout 5th Main		1	320.00	0.45	0.05	7.20		
	Nanjappa layout 4th Cross		1	340.00	0.50	0.05	8.50		
							15.70	**6172.38**	**96906.00**
	Basic Rate	5823.00							
	Area Weightage @ 6%	349.38							

	Total	**6172.38**							
6	KSRRB M500-10. Tack Coat:- Providing and applying **tack coat** using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechancial broom. complete as per specifications. MORTH Specification No. 503 (P-159, Item.no 21.10).								
	Nanjappa Layout 4th Cross		1	340.00	5.00		1700.00		
	1st A main road Nanjappa layout (Ballappa Road)		1	160.00	5.00		800.00		
	Nanjappa layout 7th A Cross		1	27.00	5.00		135.00		
	C-ramayya Layout								
	10th Cross Road (RHS)		1	75.00	5.00		375.00		
	9th Cross Road (RHS)		1	75.00	5.00		375.00		
	8th Cross Road (RHS)		1	75.00	5.00		375.00		
	8th C Cross Road (LHS)		1	75.00	5.00		375.00		
	7th Cross Road(RHS)		1	75.00	5.00		375.00		
	10th Cross Road (LHS)		1	25.00	5.00		125.00		
	9th Cross Road (LHS)		1	25.00	5.00		125.00		
	7th Cross Road(LHS)		1	75.00	5.00		375.00		
	6th Cross Road (RHS)		1	75.00	5.00		375.00		
	Chamundeshwari layout 2nd main 4th Cross		1	90.00	5.00		450.00		
	Chamundeshwari layout 2nd main 5th Cross		1	30.00	5.00		150.00		
	1st A main road (Ganesh Gowda House Road)		1	136.00	5.00		680.00		
	Chamundeshwari Layout 5th Main		1	320.00	5.00		1600.00		
	1st A main road (Ganesh Gowda House Road)		1	120.00	5.00		600.00		
	1st Main road (Ganesh Temple road) Chamundeshwari nagar		1	100.00	5.00		500.00		
	Approch Roads		1	100.00	5.00		500.00		
							9990.00	**12.72**	**127073.00**
	Basic Rate	12.00							
	Area Weightage @ 6%	0.72							
	Total	**12.72**							
7	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-	**Cum**							

	45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19								
	Nanjappa Layout 4th Cross		1	340.00	5.00	0.04	68.00		
	1st A main road Nanjappa layout (Ballappa Road)		1	160.00	5.00	0.04	32.00		
	Nanjappa layout 7th A Cross		1	27.00	5.00	0.04	5.40		
	C-ramayya Layout								
	10th Cross Road (RHS)		1	75.00	5.00	0.04	15.00		
	9th Cross Road (RHS)		1	75.00	5.00	0.04	15.00		
	8th Cross Road (RHS)		1	75.00	5.00	0.04	15.00		
	8th C Cross Road (LHS)		1	75.00	5.00	0.04	15.00		
	7th Cross Road(RHS)		1	75.00	5.00	0.04	15.00		
	10th Cross Road (LHS)		1	25.00	5.00	0.04	5.00		
	9th Cross Road (LHS)		1	25.00	5.00	0.04	5.00		
	7th Cross Road(LHS)		1	75.00	5.00	0.04	15.00		
	6th Cross Road (RHS)		1	75.00	5.00	0.04	15.00		
	Chamundeshwari layout 2nd main 4th Cross		1	90.00	5.00	0.04	18.00		
	Chamundeshwari layout 2nd main 5th Cross		1	30.00	5.00	0.04	6.00		
	1st A main road (Ganesh Gowda House Road)		1	136.00	5.00	0.04	27.20		
	Chamundeshwari Layout 5th Main		1	320.00	5.00	0.04	64.00		
	1st A main road (Ganesh Gowda House Road)		1	120.00	5.00	0.04	24.00		
	1st Main road (Ganesh Temple road) Chamundeshwari nagar		1	100.00	5.00	0.04	20.00		
	Approch Roads		1	100.00	5.00	0.04	20.00		
							399.60		
	For profile correction (10% of total quantity)						**39.96**		
							439.56	**8869.02**	**3898466.00**
	Basic Rate	8367.00							
	Area Weightage @ 6%	502.02							
	Total	**8869.02**							
8	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2018-19).	Sqm							

	Nanjappa Layout 4th Cross		2.5	340.00	0.10		85.00		
	1st A main road Nanjappa layout (Ballappa Road)		2.5	160.00	0.10		40.00		
	Nanjappa layout 7th A Cross		2.5	27.00	0.10		6.75		
	C-ramayya Layout								
	10th Cross Road (RHS)		2.5	75.00	0.10		18.75		
	9th Cross Road (RHS)		2.5	75.00	0.10		18.75		
	8th Cross Road (RHS)		2.5	75.00	0.10		18.75		
	8th C Cross Road (LHS)		2.5	75.00	0.10		18.75		
	7th Cross Road(RHS)		2.5	75.00	0.10		18.75		
	10th Cross Road (LHS)		2.5	25.00	0.10		6.25		
	9th Cross Road (LHS)		2.5	25.00	0.10		6.25		
	7th Cross Road(LHS)		2.5	75.00	0.10		18.75		
	6th Cross Road (RHS)		2.5	75.00	0.10		18.75		
	Chamundeshwari layout 2nd main 4th Cross		2.5	90.00	0.10		22.50		
	Chamundeshwari layout 2nd main 5th Cross		2.5	30.00	0.10		7.50		
	1st A main road (Ganesh Gowda House Road)		2.5	136.00	0.10		34.00		
	Chamundeshwari Layout 5th Main		2.5	320.00	0.10		80.00		
	1st A main road (Ganesh Gowda House Road)		2.5	120.00	0.10		30.00		
	1st Main road (Ganesh Temple road) Chamundeshwari nagar		2.5	100.00	0.10		25.00		
	Approch Roads		2.5	100.00	0.10		25.00		
							499.50	**454.74**	**227143.00**
	Basic Rate	429.00							
	Area Weightage @ 6%	25.74							
	Total	**454.74**							
							Grand Total		**4812260.00**
9	For 12% Applicable GST								**577471.00**
10	For 2% PMC Charges								**96245.00**
11	Miscesallaneous Charges								**14024.00**
									5500000.00

Swetha N K
AE W10

Technical Sanction
Accorded For RSS & Waste only
Head of A/C P-311
CER NO :..312..... Dt:07.03.19

TA CE (YNK)

Name of work: Improvements to Roads and Drains in Kuvempu Nagara, Singapura, Ramachandrapura and surrounding area's in ward no-11

								Estimate Cost Rs.	12000000.00
Sl No	**Description of item**	**Unit**	**No**	**L**	**B**	**D**	**Qty**	**Rate**	**Amount**
1	KSRRB 300-1. **Earth work excavation** by manual means in Ordinary Soil soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications complete as per specifications.MORTH chapter 3. P No. 143/ Item No. 19.1/ PWD SR 2018-19	Cum							
	For Road Cutting Protion								
	Singapura Paradise Main Road		2	405.00	1.40	0.30	340.20		
	Cross Road-5		2	130.00	0.45	0.30	35.10		
	Cross Road-6		2	130.00	0.90	0.30	70.20		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		2	30.00	0.45	0.30	8.10		
	Sub road-2		2	40.00	0.45	0.30	10.80		
	Sub road-3		2	50.00	0.45	0.30	13.50		
	Sub road-4		2	65.00	0.45	0.30	17.55		
	Sommanna layout Main Road (Width-0.9+0.9+1.5)								
	7th main road		1	120.00	3.30	0.30	118.80		
	1st stage main road		1	150.00	3.30	0.30	148.50		
	2nd stage main road		1	150.00	3.30	0.30	148.50		
	3rd stage main road		1	150.00	3.30	0.30	148.50		
	4th stage main road		1	150.00	3.30	0.30	148.50		
	5th stage main road		1	150.00	3.30	0.30	148.50		
	6th cross main road		1	100.00	7.80	0.30	234.00		
							1590.75	**137.80**	**219205.00**
	Basic Rate	130.00							
	Area Weightage @ 6%	7.80							
	Total	**137.80**							
2	KSRRB M400-17: Providing, laying spreading and compacting graded stones aggregate to **Wet mix macadam** specifications including premixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying, in uniform layers with paver in sub base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. MORTH specification NO. 406,P No. 155/ Item No. 20.18/ PWD SR 2018-19	Cum							
	Singapura Paradise Main Road		2	405.00	1.40	0.23	260.82		
	Cross Road-5		2	130.00	0.45	0.23	26.91		
	Cross Road-6		2	130.00	0.90	0.23	53.82		
	Singapura Paradise 6th cross Sub-Roads								

	Sub road-1		2	30.00	0.45	0.23	6.21		
	Sub road-2		2	40.00	0.45	0.23	8.28		
	Sub road-3		2	50.00	0.45	0.23	10.35		
	Sub road-4		2	65.00	0.45	0.23	13.46		
	Sommanna layout Main Road (Width-0.9+0.9+1.5)								
	7th main road		1	120.00	3.30	0.23	91.08		
	1st stage main road		1	150.00	3.30	0.23	113.85		
	2nd stage main road		1	150.00	3.30	0.23	113.85		
	3rd stage main road		1	150.00	3.30	0.23	113.85		
	4th stage main road		1	150.00	3.30	0.23	113.85		
	5th stage main road		1	150.00	3.30	0.23	113.85		
	6th cross main road		1	100.00	7.80	0.23	179.40		
							1219.58	**2001.28**	**2440711.00**
	Basic Rate	1888.00							
	Area Weightage @ 6%	113.28							
	Total	**2001.28**							
3	KSRRB 500-4: providing and applying **primer coat** from 7.5 to 9.8 kg and 9.8 to 12.2kg per 10 sqm for surfaces of low and medium porosity respectively over prepared surface of granular base with cut bank M.C-70 or any other bitumen mixed with diesel at 10 kg per 10 sqm heated in bitumen boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specificationsDo-Medium Porosity MORTH chapter 5, No. 158/ Item No. 21.6/ PWD SR 2018-19	Sqm							
	Singapura Paradise Main Road		2	405.00	1.40		1134.00		
	Cross Road-5		2	130.00	0.45		117.00		
	Cross Road-6		2	130.00	0.90		234.00		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		2	30.00	0.45		27.00		
	Sub road-2		2	40.00	0.45		36.00		
	Sub road-3		2	50.00	0.45		45.00		
	Sub road-4		2	65.00	0.45		58.50		
	Sommanna layout Main Road (Width-0.9+0.9+1.5)								
	7th main road		1	120.00	3.30		396.00		
	1st stage main road		1	150.00	3.30		495.00		
	2nd stage main road		1	150.00	3.30		495.00		
	3rd stage main road		1	150.00	3.30		495.00		
	4th stage main road		1	150.00	3.30		495.00		
	5th stage main road		1	150.00	3.30		495.00		
	6th cross main road		1	100.00	7.80		780.00		
							5302.50	**36.04**	**191102.00**
	Basic Rate	34.00							
	Area Weightage @ 6%	2.04							
	Total	**36.04**							

4	KSRRB 500-11. Providing and laying **bituminous macadam** on Prepared Surface with crushed Coarse aggregates as per Design mix formulae for base/binding course including loading of aggregates with F.E loader,Hot mixing of Stone aggregates and bitumen in Hot mix plant, transporting the mixed material in tipper to paver and laying mixed materials with paver finisher to the required level and grade, rolling by power roller to achieve desired density, but excluding cost of primer/Tack coat including lead, lift and cost of all materials, labour HOM of machinaries complete as per Specifications. MORTH Ch 5. using 40/60 TPH capacity HMP with Mechanical paver Gr-II (50mm - 75mm) with 3.4% VG-30 bitumen. Item no:21.11.6								
	Singapura Paradise Main Road (1.5m UGD Cut portion)		2	405.00	2.90	0.05	117.45		
	Cross Road-5		2	130.00	0.45	0.05	5.85		
	Cross Road-6		2	130.00	0.90	0.05	11.70		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		2	30.00	0.45	0.05	1.35		
	Sub road-2		2	40.00	0.45	0.05	1.80		
	Sub road-3		2	50.00	0.45	0.05	2.25		
	Sub road-4		2	65.00	0.45	0.05	2.93		
	Sommanna layout Main Road (Cut portion-0.9+0.9 &UGD-1.5)								
	7th main road		1	120.00	3.30	0.05	19.80		
	1st stage main road		1	150.00	3.30	0.05	24.75		
	2nd stage main road		1	150.00	3.30	0.05	24.75		
	3rd stage main road		1	150.00	3.30	0.05	24.75		
	4th stage main road		1	150.00	3.30	0.05	24.75		
	5th stage main road		1	150.00	3.30	0.05	24.75		
	6th cross main road		1	100.00	7.80	0.05	39.00		
							325.88	**6172.38**	**2011424.00**
	Basic Rate	5823.00							
	Area Weightage @ 6%	349.38							
	Total	**6172.38**							
5	KSRRB M500-10. Tack Coat:- Providing and applying **tack coat** using 80/100 grade bitumen (VG 10) in boiler fitted with spray set distributor at the rate of 0.20 kg per sqm on the existing prepared bituminous surface cleaned with mechancial broom. complete as per specifications. MORTH Specification No. 503 (P-159, Item.no 21.10).	**Sqm**							
	Singapura Paradise Main Road		1	405.00	11.80		4779.00		
	Cross Road-5		1	130.00	5.40		702.00		
	Cross Road-6		1	130.00	5.40		702.00		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		1	30.00	4.50		135.00		
	Sub road-2		1	40.00	4.50		180.00		
	Sub road-3		1	50.00	4.50		225.00		

	Sub road-4		1	65.00	4.50		292.50		
	Sommanna layout Main Road (Cut portion-0.9+0.9 &UGD-1.5)								
	7th main road		1	120.00	7.80		936.00		
	1st stage main road		1	150.00	7.80		1170.00		
	2nd stage main road		1	150.00	7.80		1170.00		
	3rd stage main road		1	150.00	7.80		1170.00		
	4th stage main road		1	150.00	7.80		1170.00		
	5th stage main road		1	150.00	7.80		1170.00		
	6th cross main road		1	100.00	7.80		780.00		
							14581.50	**12.72**	**185477.00**
	Basic Rate	12.00							
	Area Weightage @ 6%	0.72							
	Total	**12.72**							
6	KSRRB M500-19: providing and laying **bituminous concrete** 40mm thick with 100-120 TPH batch type hot mix plant producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 5.4 to 5.6% of mix and filler, transporting the hot mix to work site, laying with hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desire compaction as per MORTH specification clause No. 500.9 complete In all respects as per specifications. MORTH specification 30-45mm compacted thicikness (GradingII) With 6% bitumen 80/100, No. 161/ Item No. 21.22.1/ PWD SR 2018-19	**Cum**							
	Singapura Paradise Main Road		1	405.00	11.80	0.04	191.16		
	Cross Road-5		1	130.00	5.40	0.04	28.08		
	Cross Road-6		1	130.00	5.40	0.04	28.08		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		1	30.00	4.50	0.04	5.40		
	Sub road-2		1	40.00	4.50	0.04	7.20		
	Sub road-3		1	50.00	4.50	0.04	9.00		
	Sub road-4		1	65.00	4.50	0.04	11.70		
	Sommanna layout Main Road (Width-0.9+0.9+1.5)								
	7th main road		1	120.00	7.80	0.04	37.44		
	1st stage main road		1	150.00	7.80	0.04	46.80		
	2nd stage main road		1	150.00	7.80	0.04	46.80		
	3rd stage main road		1	150.00	7.80	0.04	46.80		
	4th stage main road		1	150.00	7.80	0.04	46.80		
	5th stage main road		1	150.00	7.80	0.04	46.80		
	6th cross main road		1	100.00	7.80	0.04	31.20		
							583.26		
	For profile correction (5% of total quantity)						**29.16**		
							612.42	**8869.02**	**5431592.00**
	Basic Rate	8367.00							
	Area Weightage @ 6%	502.02							
	Total	**8869.0**							

		2							
7	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803 (Page No 181., I.No.24.15 of KPWD S.R 2018-19).	Sqm							
	Singapura Paradise Main Road		0.5	405.00	0.10		20.25		
	Cross Road-5		0.5	130.00	0.10		6.50		
	Cross Road-6		0.5	130.00	0.10		6.50		
	Singapura Paradise 6th cross Sub-Roads								
	Sub road-1		0.5	30.00	0.10		1.50		
	Sub road-2		0.5	40.00	0.10		2.00		
	Sub road-3		0.5	50.00	0.10		2.50		
	Sub road-4		0.5	65.00	0.10		3.25		
	Sommanna layout Main Road (Width-0.9+0.9+1.5)								
	7th main road		0.5	120.00	0.10		6.00		
	1st stage main road		0.5	150.00	0.10		7.50		
	2nd stage main road		0.5	150.00	0.10		7.50		
	3rd stage main road		0.5	150.00	0.10		7.50		
	4th stage main road		0.5	150.00	0.10		7.50		
	5th stage main road		0.5	150.00	0.10		7.50		
	6th cross main road		0.5	100.00	0.10		5.00		
							91.00	**454.74**	**41381.00**
	Basic Rate	429.00							
	Area Weightage @ 6%	25.74							
	Total	**454.74**							
							Grand Total		**10520892.00**
8	For 12% Applicable GST								**1262507.00**
9	For 2% PMC Charges								**210418.00**
10	Miscellaneous Charges								**6183.00**
									12000000.00

Technical Sanction
Accorded For RS120.00 lakhs only
Head of A/C. P-3409
CER NO :...311..... Dt:..07.03.2019

TA CE (YNK)